

ABSTRACT

A screen for detecting, identifying, and characterizing chemicals as toxicants is based on the affect of the chemical on gene expression in animal cleavage stage embryos. A microarray screen for detecting and measuring the affects of chemicals on gene expression in animal cleavage stage embryos. A screen for detecting, identifying, and characterizing chemicals as toxicants based on the common or differential affects on gene expression in animal cleavage stage embryos and neurulation stage embryos. Markers of chemical exposure and teratogenesis identified using the screen disclosed herein. A treatment that enables the transfer of biotinylated PCR products or DNA to a membrane following gel electrophoresis by depurinating the PCR or DNA products and denaturing the PCR products or DNA.